



U.S. Department of Justice

Federal Bureau of Investigation

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Washington, D. C. 20535

November 6, 1991

John E. Burris, PhD.  
Executive Director  
Commission on Life Sciences  
National Research Council  
2101 Constitution Avenue, N.W.  
Washington, D.C. 20418

Dear John:

As I advised you on October 28, 1991, I was recently provided the purported final draft of Chapter 3 of the National Research Council's pending report on the forensic use of DNA technology. I received it from individuals who expressed their deep concern that Chapter 3 does not present an objective, balanced or accurate perspective of the statistical issues associated with forensic DNA typing. The fear is that given the contentiousness and apparent confusion over such issues currently being experienced in some courts that the opinions expressed in Chapter 3 could be exploited by legal adversaries to the detriment of the criminal justice process. After reviewing the chapter, I share their concern.

Attached is an appendix which identifies some of the more troubling areas of this chapter. If it would be helpful, we would be pleased to participate in a meeting to discuss these issues further.

Of primary concern is the fact that the chapter fails to acknowledge current community practice for the statistical interpretation of DNA typing results. These practices are supported by substantial data, published and unpublished, all of which was provided or is readily available to the committee. While apparently ignoring this significant body of literature and experience, the chapter uses citations on a selective basis to support its advocacy of a particular hypothesis. Among references used are a personal communication with a scientist known to be sympathetic to the theory being proffered, an article which appeared in Nature in 1989, which is best characterized as an editorialization and a tongue-in-cheek newsletter called Scientific Sleuthing. Such tactics are clearly inappropriate for an authoritative study which we fully expect to have a significant impact on the continued development of forensic uses of DNA technology.

John E. Burris, PhD.

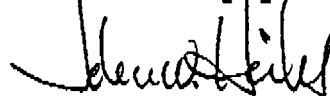
Throughout Chapter 3 there is the use of overly simplistic analogy (red Porsches, for example) and a manipulative use of disease-gene frequency extremes that is clearly intended to persuade the non-scientist to the author's point of view. Conclusions are based on skimpy anecdotes which do not provide sufficient information to permit the reader to judge the basis for the conclusion. There is also the frequent mixing of technical issues with legal terms and concepts which has the effect of creating unnecessary confusion. I would urge the committee to carefully consider the appropriateness of such rhetorical display in this kind of report.

I should add that I was initially reluctant to submit these concerns to you while the report is in the draft stage for fear that it would be seen as interfering with the National Research Council study process. As you know, the FBI strongly encouraged that this study be conducted. An objective and informed scientific review of the forensic application of DNA technology will certainly be of great assistance to the courts which must weigh issues of admissibility and legal constraints. Unfortunately, Chapter 3, as currently written, lacks objectivity and does not represent an informed perspective. The narrow views presented in this chapter are likely to exacerbate any misconceptions in the legal community on the nature of technical controversies which may exist.

From my perspective, there seems to be general agreement within the informed scientific community on the statistical approaches being used in the forensic application of DNA technology. While Chapter 3 indicates "substantial controversy exists," it is significant to note its primary author is the principal source of much of the controversy.

I highly recommend that Chapter 3 be rewritten by informed and impartial scientists to ensure an accurate portrayal of the issues and a fair description of alternative approaches.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "John W. Hicks", written in a cursive style.

John W. Hicks  
Assistant Director in Charge  
Laboratory Division

Enclosure